



# **STIC Search Report**

## **Biotech-Chem Library**

**STIC Database Tracking Number: 9186915**

**TO: Michael Borin**  
**Location: 2a55 / 2c70**  
**Monday, May 08, 2006**  
**Art Unit: 1631**  
**Phone: 571-272-0713**  
**Serial Number: 10 / 659233**

**From: Jan Delaval**  
**Location: Biotech-Chem Library**  
**Remsen 1a51**  
**Phone: 571-272-2504**

**jan.delaval@uspto.gov**

### **Search Notes**

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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: Michael BORIN Examiner #: 74104 Date: 04/25/06  
Art Unit: 1631 Phone Number: 2-0713 Serial Number: 10/659233  
Location (Bldg/Room#): 2A55 (Mailbox #): 2070 Results Format Preferred (circle) PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following: 119

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Date: \_\_\_\_\_

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search compound of claim 41

Thank you

STAFF USE ONLY

Searcher: [Signature]

Searcher Phone #: 22504

Searcher Location: \_\_\_\_\_

Date Searcher Picked Up: 5/8/06

Date Completed: 5/8/06

Searcher Prep & Review Time: 5

Online Time: 5

Type of Search

\_\_\_\_ NA Sequence (#)

\_\_\_\_ AA Sequence (#)

✓ Structure (#)

\_\_\_\_ Bibliographic

\_\_\_\_ Litigation

\_\_\_\_ Fulltext

\_\_\_\_ Other

Vendors and cost where applicable

✓ STN \_\_\_\_\_ Dialog

\_\_\_\_ Questel/Orbit \_\_\_\_\_ Lexis/Nexis

\_\_\_\_ Westlaw \_\_\_\_\_ WWW/Internet

\_\_\_\_ In-house sequence systems

\_\_\_\_ Commercial \_\_\_\_\_ Oligomer \_\_\_\_\_ Score/Length  
\_\_\_\_ Interference \_\_\_\_\_ SPDI \_\_\_\_\_ Encode/Transl  
\_\_\_\_ Other (specify)



# STIC SEARCH RESULTS FEEDBACK FORM

## Biotech-Chem Library

Questions about the scope or the results of the search? Contact *the searcher or contact:*

Mary Hale, Information Branch Supervisor  
22507, Remsen 1d86

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library CM1 – Circ. Desk



=> fil reg

FILE 'REGISTRY' ENTERED AT 09:31:03 ON 08 MAY 2006  
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Property values tagged with IC are from the ZIC/VINITI data file  
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STRUCTURE FILE UPDATES: 7 MAY 2006 HIGHEST RN 883215-66-5  
DICTIONARY FILE UPDATES: 7 MAY 2006 HIGHEST RN 883215-66-5

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TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d 15 sqide can

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN  
RN 220382-59-2 REGISTRY  
CN L-Leucinamide, N2-(1-oxo-3-phenylpropyl)-L-asparaginy-L-phenylalanyl-1-  
aminocyclopropanecarbonyl- (9CI) (CA INDEX NAME)  
FS PROTEIN SEQUENCE; STEREOSEARCH  
SQL 4  
NTE modified (modifications unspecified)

type	location	description
uncommon	Aaa-3	-

SEQ 1 NFXL

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

MF C32 H42 N6 O6

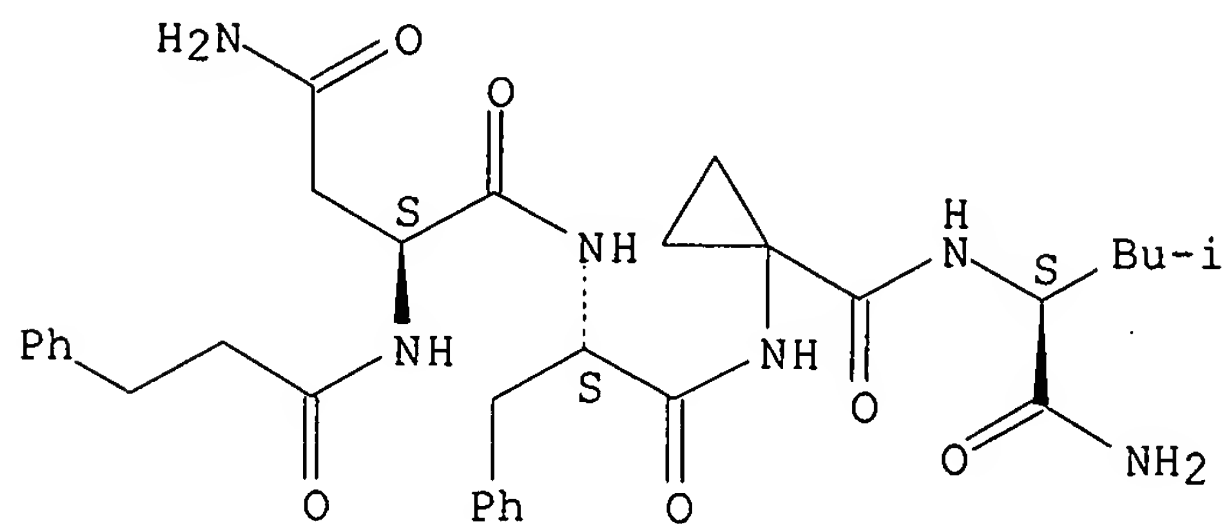
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Conference; Patent

jan delaval - 8 may 2006

Absolute stereochemistry.



jan delaval - 8 may 2006

AN 2000:351381 HCAPLUS  
 DN 132:344456  
 ED Entered STN: 26 May 2000  
 TI Preparation of mimetic insect allatostatin analogs for insect control.  
 IN Nachman, Ronald J.; Teal, Peter E..A.; Garside, Christopher S.; Tobe, Stephen S.  
 PA United States of America, Secretary of Agriculture, USA; Governing Council of the University of Toronto  
 SO PCT Int. Appl., 40 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K0038-04  
 ICS A61K0038-08  
 CC 5-4 (Agrochemical Bioregulators)  
 Section cross-reference(s): 34

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000029010	A1	20000525	WO 1999-US26939	19991112
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6207643	B1	20010327	US 1998-191906	19981113
US 6664371	B1	20031216	US 2001-680201	20010119
US 2003161857	A1	20030828	US 2003-385317	20030310
US 2004039159	A1	20040226	US 2003-659509	20030910
US 2004229812	A1	20041118	US 2003-659233	20030910
PRAI US 1998-191906	A	19981113		
US 2001-680201	A3	20010119		

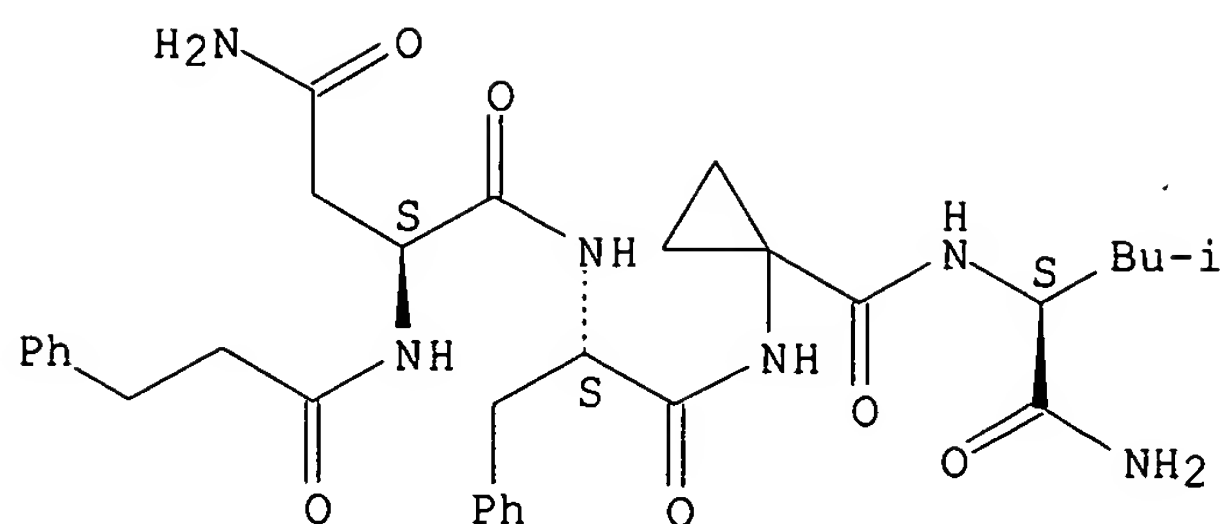
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000029010	ICM	A61K0038-04
	ICS	A61K0038-08
	IPCI	A61K0038-04 [ICM,7]; A61K0038-08 [ICS,7]
	IPCR	C07K0007-00 [I,C]; C07K0007-06 [I,A]; C07K0007-08 [I,A]
	ECLA	C07K007/06A; C07K007/08A
US 6207643	IPCI	A61K0038-08 [ICM,7]; A61K0038-10 [ICS,7]
	IPCR	C07K0007-00 [I,C]; C07K0007-06 [I,A]; C07K0007-08 [I,A]
	NCL	514/014.000; 514/016.000; 514/017.000; 530/326.000; 530/327.000; 530/329.000; 530/330.000
	ECLA	C07K007/06A; C07K007/08A
US 6664371	IPCI	A61K0038-09 [ICM,7]; A61K0038-10 [ICS,7]
	IPCR	C07K0007-00 [I,C]; C07K0007-06 [I,A]; C07K0007-08 [I,A]
	NCL	530/329.000; 530/326.000; 530/327.000; 530/328.000; 530/330.000
	ECLA	C07K007/06A; C07K007/08A
US 2003161857	IPCI	A01N0025-00 [ICM,7]; C07K0007-08 [ICS,7]; C07K0007-06 [ICS,7]
	IPCR	C07K0007-00 [I,C]; C07K0007-06 [I,A]; C07K0007-08 [I,A]
	NCL	424/405.000
	ECLA	C07K007/06A; C07K007/08A
US 2004039159	IPCI	C07K0007-06 [ICM,7]; C07K0005-06 [ICS,7]



IPCR C07K0007-00 [I,C]; C07K0007-06 [I,A]; C07K0007-08 [I,A]  
 NCL 530/329.000  
 ECLA C07K007/06A; C07K007/08A  
 US 2004229812 IPCI A61K0038-08 [ICM,7]; A61K0038-06 [ICS,7]; C07K0007-06 [ICS,7]  
 IPCR C07K0007-00 [I,C]; C07K0007-06 [I,A]; C07K0007-08 [I,A]  
 NCL 514/017.000  
 ECLA C07K007/06A; C07K007/08A  
 OS MARPAT 132:344456  
 AB Novel pseudopeptide analogs of the insect allatostatin neuropeptide family which possess biol. activity mimicking that of the naturally occurring neuropeptides are disclosed. By addition of a hydrophobic moiety to an active portion of the allatostatin peptides, analogs are produced which exhibit an overall amphiphilic nature and which are capable of penetrating the insect cuticle while still retaining biol. activity. Furthermore, by substituting sterically hindered amino acids or aromatic acids for any or all of the first, third or fifth amino acid residues of the allatostatin C-terminal pentapeptide, analogs may be produced which are resistant to degradation by insect peptidases while still retaining biol. activity. The analogs may be used for insect control by disrupting critical reproductive and/or developmental processes normally regulated by allatostatins in insects. Preparation of the analogs is given.  
 ST insect allatostatin analogs prepn insecticide  
 IT Insecticides  
 (preparation of mimetic insect allatostatin analogs for insect control.)  
 IT Neuropeptides  
 RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of mimetic insect allatostatin analogs for insect control.)  
 IT 214470-28-7P 214470-29-8P **220382-59-2P**  
 RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation as mimetic insect allatostatin analog for insect control.)  
 IT 110119-33-0DP, Allatostatin, analogs  
 RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation for insect control)  
 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE  
 (1) Hayes, T; Peptides 1994, V15(7), P1165 HCAPLUS  
 (2) Nachman; Bioorganic and Medicine Chemistry 1998, V6(8), P1379 HCAPLUS  
 (3) Nachman; Proc Int Congr Comp Endocrinol 13th 1997, V2, P1353 HCAPLUS  
 IT **220382-59-2P**  
 RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation as mimetic insect allatostatin analog for insect control.)  
 RN 220382-59-2 HCAPLUS  
 CN L-Leucinamide, N2-(1-oxo-3-phenylpropyl)-L-asparaginy-L-phenylalanyl-1-aminocyclopropanecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN  
 AN 1998:754590 HCAPLUS  
 DN 130:168629  
 ED Entered STN: 02 Dec 1998  
 TI Active conformation and peptidase resistance of conformationally restricted analogs of the insect allatostatin neuropeptide family  
 AU Nachman, R. J.; Moyna, G.; Williams, H. J.; Garside, C.; Tobe, S. S.  
 CS Veterinary Entomology Research Unit, FAPRL, U.S. Department of Agriculture, College Station, TX, USA  
 SO Advances in Comparative Endocrinology, Proceedings of the International Congress of Comparative Endocrinology, 13th, Yokohama, Nov. 16-21, 1997 (1997), Volume 2, 1353-1359. Editor(s): Kawashima, Seiichiro; Kikuyama, Sakae. Publisher: Monduzzi Editore, Bologna, Italy.  
 CODEN: 66ZWA3  
 DT Conference  
 LA English  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 AB The authors address through the design, synthesis and biol. evaluation of a series of linear mimetic allatostatin analogs containing conformationally restricted components within the C-terminal pentapeptide active core sequence. As these conformationally restricted analogs necessarily involve incorporation of sterically hindered mol. structures, these analogs have been addnl. tested for patterns of hydrolysis via hemolymph and tissue-bound peptidases.  
 ST allatostatin conformation peptidase structure activity  
 IT Peptidomimetics  
 Structure-activity relationship  
 (allatostatin conformationally restricted analogs and their resistance to peptidase)  
 IT Conformation  
 (protein; allatostatin conformationally restricted analogs and their resistance to peptidase)  
 IT 110119-33-0DP, Allatostatin, analogs 196201-71-5P, 4-8-Allatostatin 1 (Aedes aegypti) 214470-28-7P 214470-29-8P 214470-30-1P 220382-58-1P **220382-59-2P**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (allatostatin conformationally restricted analogs and their resistance to peptidase)  
 IT 9031-96-3, Peptidase  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (allatostatin conformationally restricted analogs and their resistance to peptidase)  
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD



RE

- (1) Bendena, W; Annals NY Acad Sci 1997, V814, P53 HCAPLUS  
 (2) Hayes, T; Peptides 1994, V15, P1165 HCAPLUS  
 (3) James, G; Science 1993, V260, P1937 HCAPLUS  
 (4) Toniolo, C; Biopolymers 1983, V22, P205 HCAPLUS

IT 220382-59-2P

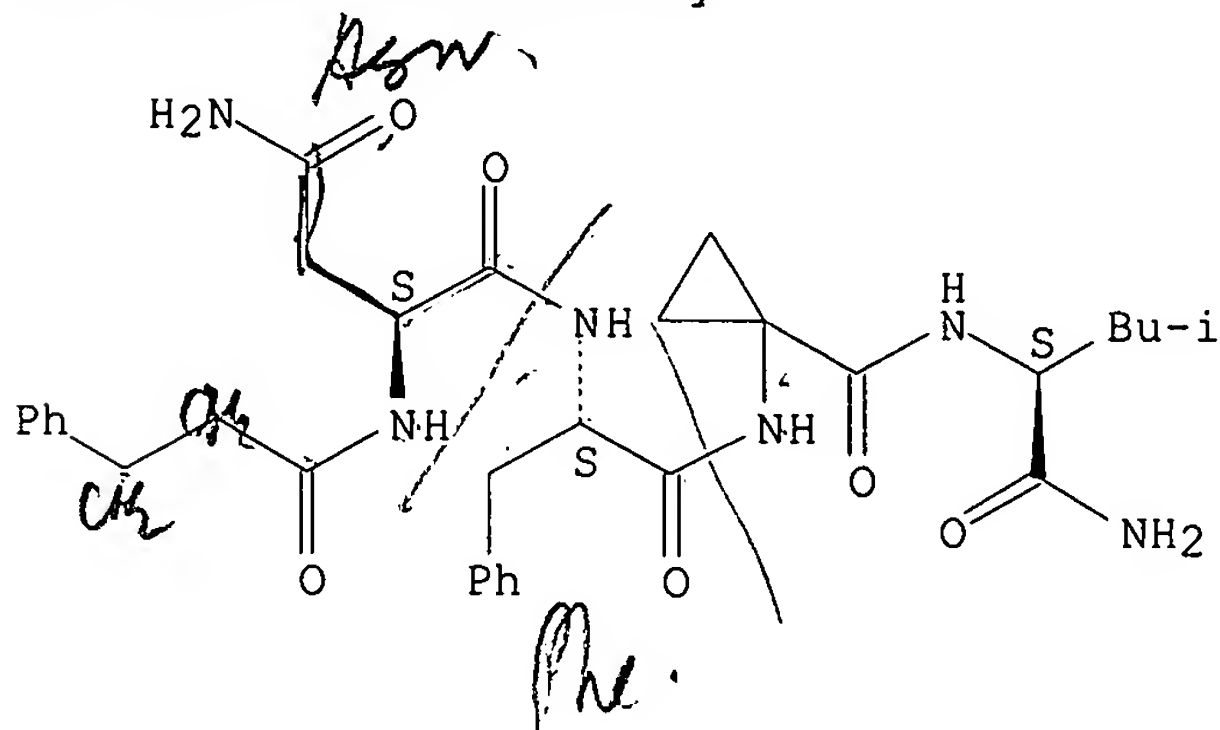
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(allatostatin conformationally restricted analogs and their resistance to peptidase)

RN 220382-59-2 HCAPLUS

CN L-Leucinamide, N2-(1-oxo-3-phenylpropyl)-L-asparaginyl-L-phenylalanyl-1-aminocyclopropanecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=&gt; fil uspatall

FILE 'USPATFULL' ENTERED AT 09:31:30 ON 08 MAY 2006

CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 09:31:30 ON 08 MAY 2006

CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=&gt; d bib abs hitstr tot 19

L9 ANSWER 1 OF 5 USPATFULL on STN

AN 2004:292723 USPATFULL

TI Mimetic insect allatostatin analogs for insect control

IN Nachman, Ronald J., Willis, TX, UNITED STATES

Teal, Peter E. A., Gainesville, FL, UNITED STATES

Garside, Christopher S., Toronto, CANADA

Tobe, Stephen S., Virgil, CANADA

PA The United States of America, as represented by the Secretary of  
 Agriculture (U.S. corporation)

PI US 2004229812 A1 20041118

AI US 2003-659233 A1 20030910 (10)

RLI Division of Ser. No. US 2001-680201, filed on 19 Jan 2001, GRANTED, Pat.  
 No. US 6664371 Division of Ser. No. US 1998-191906, filed on 13 Nov  
 1998, GRANTED, Pat. No. US 6207643

DT Utility

FS APPLICATION

LREP USDA-ARS-OFFICE OF TECHNOLOGY TRANSFER, NATIONAL CTR FOR AGRICULTURAL  
 UTILIZATION RESEARCH, 1815 N. UNIVERSITY STREET, PEORIA, IL; 61604

CLMN Number of Claims: 40

ECL Exemplary Claim: 1

jan delaval - 8 may 2006

DRWN 4 Drawing Page(s)

LN.CNT 1103

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel pseudopeptide analogs of the insect allatostatin neuropeptide family which possess biological activity mimicking that of the naturally occurring neuropeptides are disclosed. By addition of a hydrophobic moiety to an active portion of the allatostatin peptides, analogs are produced which exhibit an overall amphiphilic nature and which are capable of penetrating the insect cuticle while still retaining biological activity. Furthermore, by substituting sterically hindered amino acids or aromatic acids for any or all of the first, third or fifth amino acid residues of the allatostatin C-terminal pentapeptide, analogs may be produced which are resistant to degradation by insect peptidases while still retaining biological activity. The analogs may be used for insect control by disrupting critical reproductive and/or developmental processes normally regulated by allatostatins in insects.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

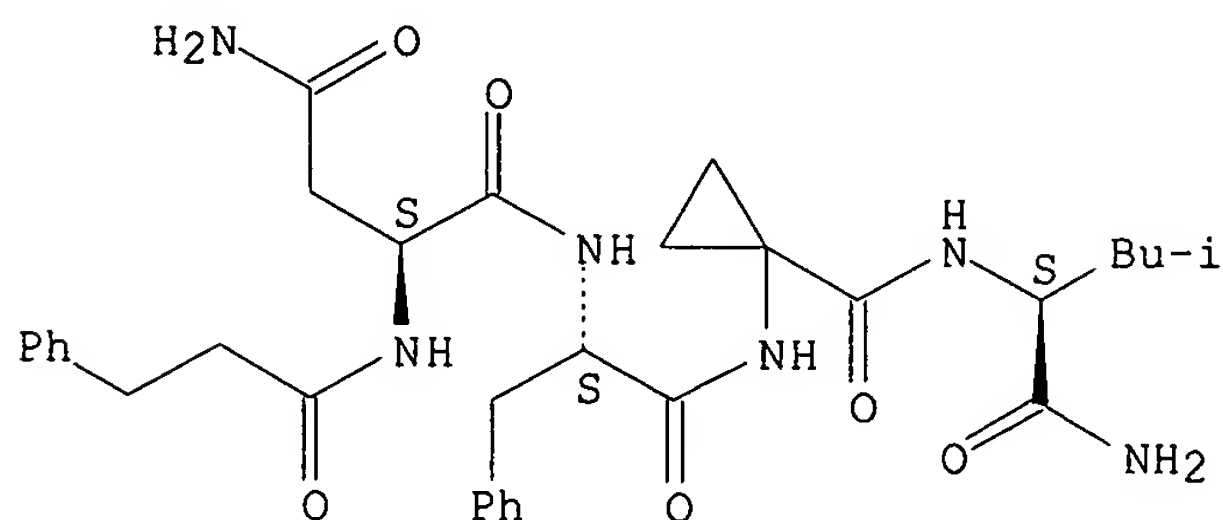
IT 220382-59-2P

(preparation as mimetic insect allatostatin analog for insect control.)

RN 220382-59-2 USPTFULL

CN L-Leucinamide, N2-(1-oxo-3-phenylpropyl)-L-asparaginyl-L-phenylalanyl-1-aminocyclopropanecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 2 OF 5 USPTFULL on STN

AN 2004:51728 USPTFULL

TI Mimetic insect allatostatin analogs for insect control

IN Nachman, Ronald J., Willis, TX, UNITED STATES

Teal, Peter E.A., Gainesville, FL, UNITED STATES

Garside, Christopher S., Toronto, CANADA

Tobe, Stephen S., Virgll, CANADA

PI US 2004039159 A1 20040226

AI US 2003-659509 A1 20030910 (10)

RLI Continuation of Ser. No. US 2001-680201, filed on 19 Jan 2001, GRANTED, Pat. No. US 6664371 Division of Ser. No. US 1998-191906, filed on 13 Nov 1998, GRANTED, Pat. No. US 6207643

DT Utility

FS APPLICATION

LREP USDA-ARS-OFFICE OF TECHNOLOGY TRANSFER, NATIONAL CTR FOR AGRICULTURAL UTILIZATION RESEARCH, 1815 N. UNIVERSITY STREET, PEORIA, IL, 61604

CLMN Number of Claims: 40

ECL Exemplary Claim: 1

DRWN 4 Drawing Page(s)

LN.CNT 1105

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel pseudopeptide analogs of the insect allatostatin neuropeptide family which possess biological activity mimicking that of the naturally occurring neuropeptides are disclosed. By addition of a hydrophobic moiety to an active portion of the allatostatin peptides, analogs are produced which exhibit an overall amphiphilic nature and which are capable of penetrating the insect cuticle while still retaining biological activity. Furthermore, by substituting sterically hindered amino acids or aromatic acids for any or all of the first, third or fifth amino acid residues of the allatostatin C-terminal pentapeptide, analogs may be produced which are resistant to degradation by insect peptidases while still retaining biological activity. The analogs may be used for insect control by disrupting critical reproductive and/or developmental processes normally regulated by allatostatins in insects.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

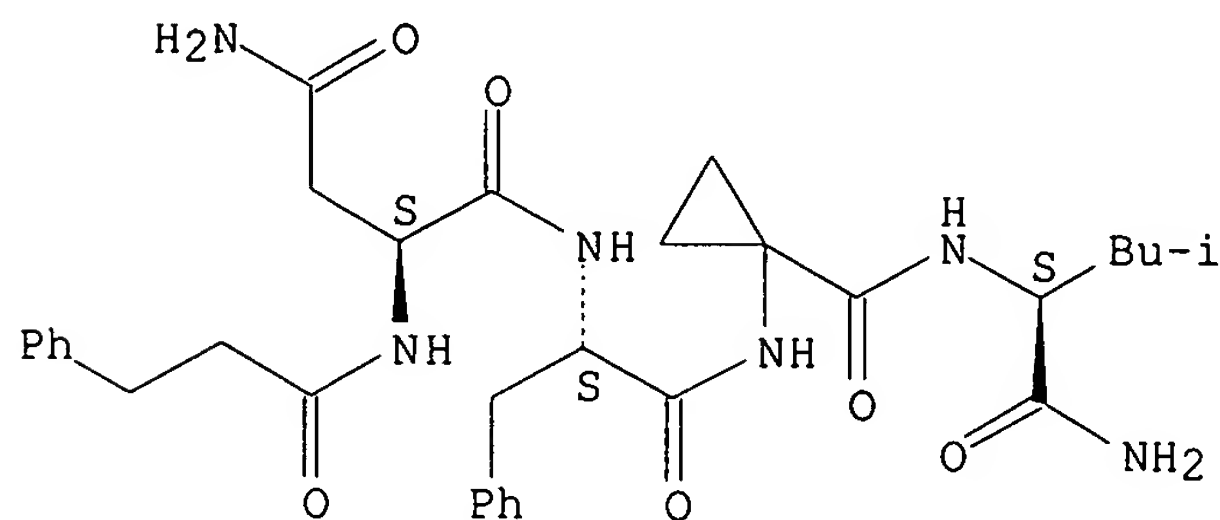
IT 220382-59-2P

(preparation as mimetic insect allatostatin analog for insect control.)

RN 220382-59-2 USPTAFULL

CN L-Leucinamide, N2-(1-oxo-3-phenylpropyl)-L-asparaginyl-L-phenylalanyl-1-aminocyclopropanecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 3 OF 5 USPTAFULL on STN

AN 2003:327049 USPTAFULL

TI Mimetic insect allatostatin analogs for insect control

IN Nachman, Ronald J., Willis, TX, United States

Teal, Peter E. A., Gainesville, FL, United States

Garside, Christopher S., Toronto, CANADA

Tobe, Stephen S., Virgil, CANADA

PA The United States of America as represented by the Secretary of Agriculture, Washington, DC, United States (U.S. government)

PI US 6664371 B1 20031216

AI US 2001-680201 20010119 (9)

RLI Division of Ser. No. US 1998-191906, filed on 13 Nov 1998, now patented, Pat. No. US 6207643

DT Utility

FS GRANTED

EXNAM Primary Examiner: Borin, Michael

LREP Fado, John D., Deck, Randall E.

CLMN Number of Claims: 7

ECL Exemplary Claim: 1

DRWN 4 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 955

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel pseudopeptide analogs of the insect allatostatin neuropeptide family which possess biological activity mimicking that of the naturally

occurring neuropeptides are disclosed. By addition of a hydrophobic moiety to an active portion of the allatostatin peptides, analogs are produced which exhibit an overall amphipilic nature and which are capable of penetrating the insect cuticle while still retaining biological activity. Furthermore, by substituting sterically hindered amino acids or aromatic acids for any or all of the first, third or fifth amino acids residues of the allatostatin C-terminal pentapeptide, analogs may be produced which are resistant to degradation by insect peptidases while still retaining biological activity. The analogs may be used for insect control by disrupting critical reproductive and/or developmental processes normally regulated by allatostatins in insects.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

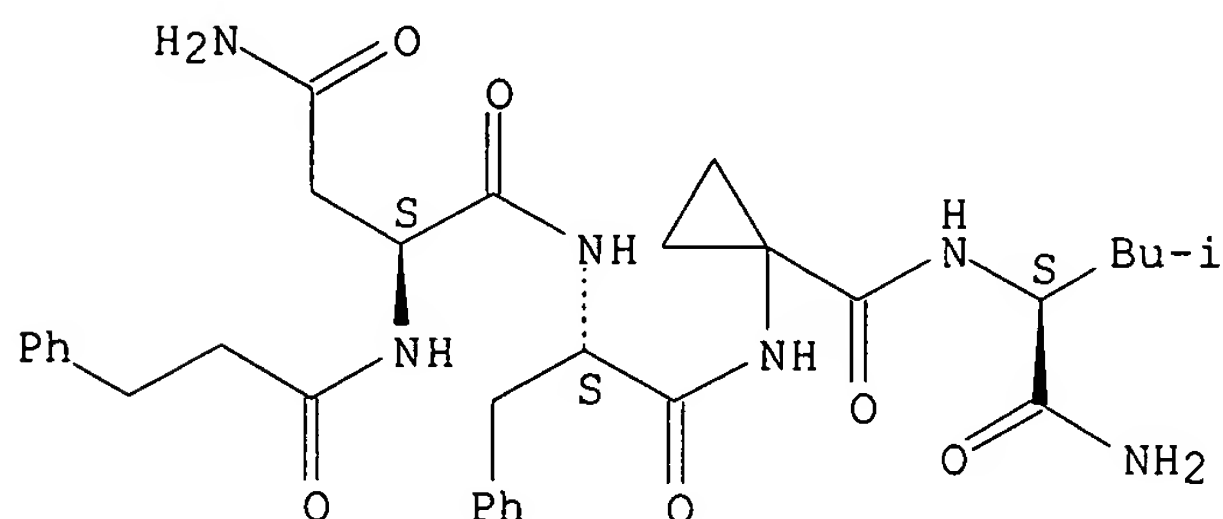
IT 220382-59-2P

(preparation as mimetic insect allatostatin analog for insect control.)

RN 220382-59-2 USPATFULL

CN L-Leucinamide, N2-(1-oxo-3-phenylpropyl)-L-asparaginyl-L-phenylalanyl-1-aminocyclopropanecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 4 OF 5 USPATFULL on STN

AN 2003:231659 USPATFULL

TI Mimetic insect allatostatin analogs for insect control

IN Nachman, Ronald J., Willis, TX, UNITED STATES

Teal, Peter E. A., Gainesville, FL, UNITED STATES

Garside, Christopher S., Toronto, CANADA

Tobe, Stephen S., Virgil, CANADA

PA United States of America, as represented by the Secretary of Agriculture (U.S. corporation)

PI US 2003161857 A1 20030828

AI US 2003-385317 A1 20030310 (10)

RLI Division of Ser. No. US 2001-680201, filed on 19 Jan 2001, PENDING  
Division of Ser. No. US 1998-191906, filed on 13 Nov 1998, GRANTED, Pat. No. US 6207643

DT Utility

FS APPLICATION

LREP USDA-ARS-OFFICE OF TECHNOLOGY TRANSFER, NATIONAL CTR FOR AGRICULTURAL UTILIZATION RESEARCH, 1815 N. UNIVERSITY STREET, PEORIA, IL, 61604

CLMN Number of Claims: 40

ECL Exemplary Claim: 1

DRWN 4 Drawing Page(s)

LN.CNT 1104

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel pseudopeptide analogs of the insect allatostatin neuropeptide family which possess biological activity mimicking that of the naturally occurring neuropeptides are disclosed. By addition of a hydrophobic

moiety to an active portion of the allatostatin peptides, analogs are produced which exhibit an overall amphiphilic nature and which are capable of penetrating the insect cuticle while still retaining biological activity. Furthermore, by substituting sterically hindered amino acids or aromatic acids for any or all of the first, third or fifth amino acid residues of the allatostatin C-terminal pentapeptide, analogs may be produced which are resistant to degradation by insect peptidases while still retaining biological activity. The analogs may be used for insect control by disrupting critical reproductive and/or developmental processes normally regulated by allatostatins in insects.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

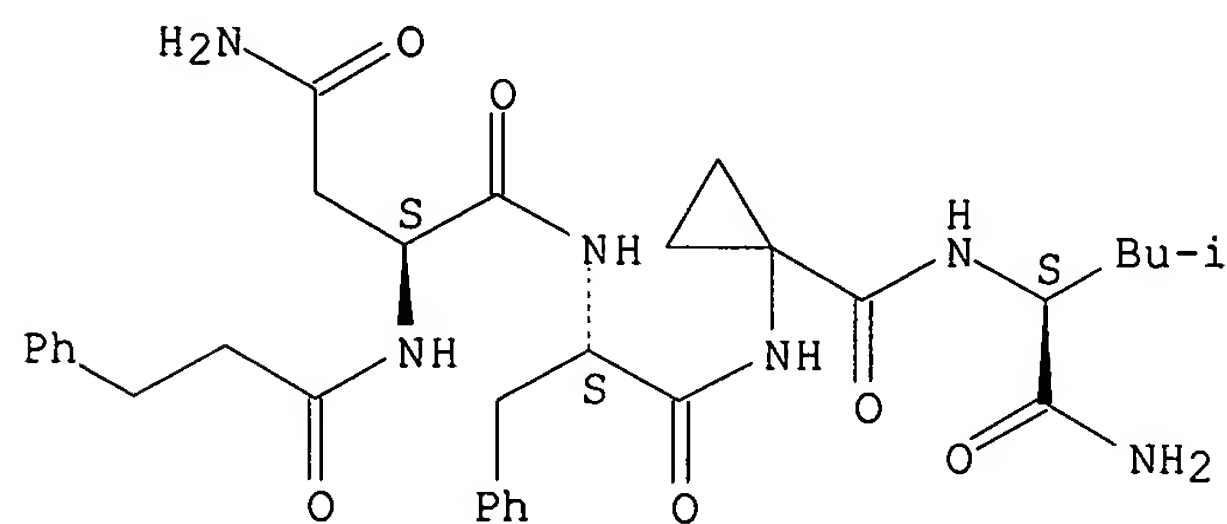
IT 220382-59-2P

(preparation as mimetic insect allatostatin analog for insect control.)

RN 220382-59-2 USPATFULL

CN L-Leucinamide, N2-(1-oxo-3-phenylpropyl)-L-asparaginyl-L-phenylalanyl-1-aminocyclopropanecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 5 OF 5 USPATFULL on STN

AN 2001:44201 USPATFULL

TI Mimetic insect allatostatin analogs for insect control

IN Nachman, Ronald J., Willis, TX, United States

Teal, Peter E. A., Gainesville, FL, United States

Garside, Christopher S., Toronto, Canada

Tobe, Stephen S., Virgil, Canada

PA The United States of America as represented by the Secretary of Agriculture, Washington, DC, United States (U.S. government)

PI US 6207643 B1 20010327

AI US 1998-191906 19981113 (9)

DT Utility

FS Granted

EXNAM Primary Examiner: Borin, M.

LREP Silverstein, M. Howard, Fado, John D., Deck, Randall E.

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN 4 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 939

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel pseudopeptide analogs of the insect allatostatin neuropeptide family which possess biological activity mimicking that of the naturally occurring neuropeptides are disclosed. By addition of a hydrophobic moiety to an active portion of the allatostatin peptides, analogs are produced which exhibit an overall amphiphilic nature and which are capable of penetrating the insect cuticle while still retaining biological activity. Furthermore, by substituting sterically hindered

amino acids or aromatic acids for any or all of the first, third or fifth amino acid residues of the allatostatin C-terminal pentapeptide, analogs may be produced which are resistant to degradation by insect peptidases while still retaining biological activity. The analogs may be used for insect control by disrupting critical reproductive and/or developmental processes normally regulated by allatostatins in insects.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

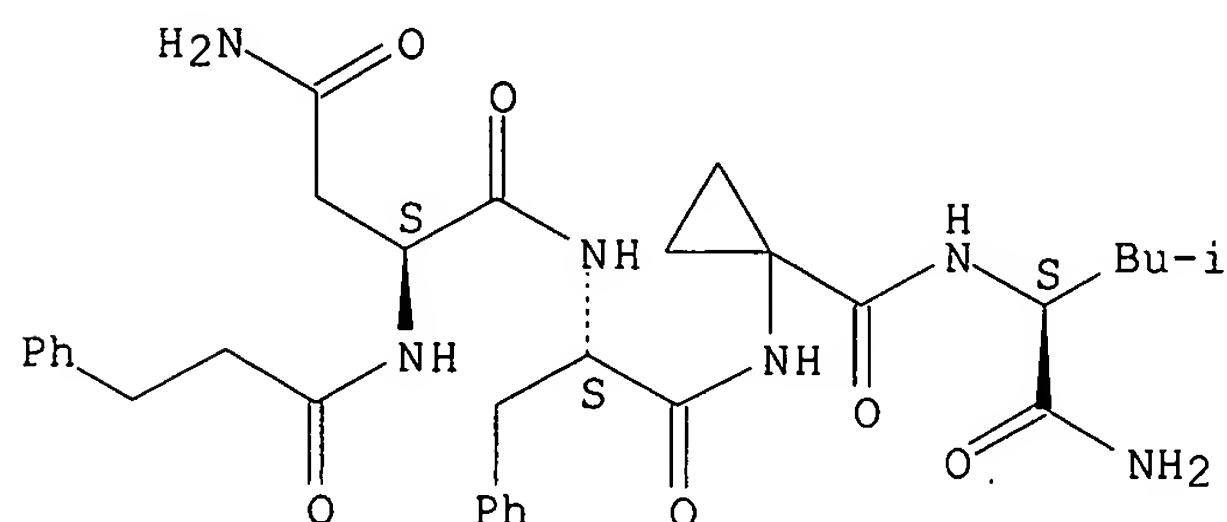
IT 220382-59-2P

(preparation as mimetic insect allatostatin analog for insect control.)

RN 220382-59-2 USPATFULL

CN L-Leucinamide, N2-(1-oxo-3-phenylpropyl)-L-asparaginyl-L-phenylalanyl-1-aminocyclopropanecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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FILE 'USPATFULL, USPAT2' ENTERED AT 09:31:30 ON 08 MAY 2006

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